

ABSTRACT

Transgenic grass plants which exhibit a color different from the color exhibited by the corresponding non-transgenic grass plants under conditions of stress are provided. Examples of such conditions include, but are not limited to, lack of fertilizer, lack of water, and attack by insects or pathogens. The genome of the transgenic grass plant comprises a transgene comprising a nucleic acid which encodes one or more regulators of anthocyanin biosynthesis, and an inducible promoter which is responsive to a stress condition, such as for example, nutrient deprivation, water deprivation, and attack by a pathogen. Transgenic grass plants which constitutively exhibits a different color phenotype, particularly a red color phenotype, are also provided. The genome of the transgenic grass plant comprises a transgene comprising an exogenous anthocyanin regulatory gene operably linked to a constitutive promoter. Grass plants that constitutively display a colored phenotype are useful for display and decorative purposes.